

Remarks/Arguments

As shown in the above listing of claims, applicants have amended claims 1, 4, 5, 12, 14, 16, 18, and 23. Claim 1 is amended to set out more specifically that the clustering algorithms apply to the combination of accessed information items and that the assigned link weight or strength is proportional to the historical frequency of the selection of the combination of informational items. Claims 4 and 5 is amended to substitute the word "weight" for weighting for clarity. Claims 12, 16 and 18 are amended to include the phrase "Bayesian-type" in the network description. Claim 14 is amended to set out more specifically that the clustering algorithms apply to the combination of accessed information items and that the relationship link weight is directly proportional to the outcome of said ensemble of algorithms. Finally, claim 23 is amended to set out more specifically that the context and path determined and stored are available when the system is accessed by any subsequent user.

Claims 1, 2, 4-12, and 14-25, as amended, remain in the application. The latest Action rejected claims 1, 2, 4-12 and 14-25 based on both 35 U.S.C. § 112, first paragraph and second paragraph. The Action also rejected claims 1, 2, 4-12 and 14-22 based on 35 U.S.C. § 102(e) as being anticipated by Horvitz et al. (U.S. Patent No. 6,021,403) and claims 23-25 based on 35 U.S.C. § 103(a) as being unpatentable over Horvitz et al. (U.S. Patent No. 6,021,403) in view of Zellweger (U.S. Patent No. 5,630,125). Applicants respectfully traverse each and every rejection and request a reconsideration of the present application in light of the amendments above and the arguments below, which will be presented in the order found in the Action.

Initially, it is important to note that a “Bayesian-type Belief Network” is defined in the specification as including a set of random variables that make up the nodes of a network, a set of directed links that connect pairs of nodes, and a conditional probability associated with each node to quantify the effect that parents have on a node. (Spec., p. 11, lines 13-17.) It is understood by those in the field that a “conditional probability” is a non-integer value between 0 and 1. The term “Bayesian-type” is defined in the application to be a network *resembling* a traditional Bayesian network, but modified such that the relationships between the nodes are represented by a *weighted value* instead of a *conditional probability*. Applicants’ weighted value or relationship strength is determined through a *non-probabilistic* process, which is described at page 9, line 17 to page 10, line 21 of the specification. More specifically, the weighted value or relationship strength is an integer that in one embodiment corresponds to the number of times a user has navigated from one node to another node. Clearly, this value or strength is *not* a conditional probability and, thus, the term *non-probabilistic* is appropriate.

Regarding the § 112, first paragraph, rejection of claims 1, 12, 16 and 18, please review pages page 9, line 17 to page 10, line 21 and page 12, lines 8-10 of the specification which discuss determining a non-probabilistic weight or strength. These pages provide information that would enable one skilled in the art to make or use the applicants’ invention.

Regarding the § 112, first paragraph, rejection of claim 14, this claim has been amended to remove the limitation relating to “means for arranging” with the weight of the relationship links now being directly proportional to the outcome of said ensemble

of algorithms. Therefore, Applicants believe that the basis for this rejection no longer exists.

Regarding the § 112, second paragraph, rejection, Applicants respectfully disagree with the Action's characterization of their original specification. As explained above, the specification clearly defines the subject network as a Bayesian-*type* network with the link weights or strengths determined in a *non-probabilistic* manner. Applicants, therefore, have claimed exactly what is described in the specification. Additionally, Applicants have amended the claims to reflect that the subject network is a "Bayesian-*type*" non-probabilistic network. Thus, there is no basis for this rejection.

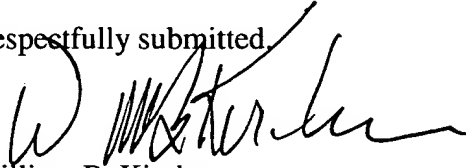
Regarding the § 102 rejection, the Action fails to acknowledge that the teachings of Horvitz are limited to Bayesian networks. In fact, Horvitz teaches away from a non-probabilistic network when it discusses how it is more appropriate to process relationships as probabilities, that probability provides us with means of diagnosing and forecasting the behavior of complex systems, and that probabilistic methods may be used to represent and reason about weak and strong uncertain dependencies among observations and then goes on to describe a Bayesian network as a network that can be used to represent the certain or uncertain relationships among user actions. (Col. 18, line 56 to col. 19, line 38.) Horvitz certainly does not teach, suggest or imply a network in which a link weight or strength is proportional to the historical frequency of the selection of the combination of informational items as in amended claim 1 or directly proportional to the outcome of said ensemble of algorithms as in amended claim 14. Thus, claims 1 and 14, as amended, and the claims depending from these claims, are not anticipated by Horvitz.

Regarding the § 103 rejection, Zellweger teaches an informational management system that enables a user to create a customized information system that runs stand-alone on an end-user's computer. Importantly, Zellweger produces a system that enables an author to customize features for each application he or she creates. Thus, Zellweger is limited to a system that is available to only one user, the user or author that customizes the system. This is directly opposite the method claimed in claim 23, as amended, in which the stored context and path are made available to any subsequent user. Thus, in the method claimed in claim 23, as amended, subsequent users may benefit from the actions of previous users. In Zellweger, the only person who benefits from a user's actions is the user himself. Zellweger, therefore, does not teach or suggest the storing limitation found claim 23 as amended and the combination of Zellweger and Horvitz does not render claim 23 or the claims depending from claim 23 unpatentable.

For the reasons stated above, claims 1, 2, 4-12, and 14-25, as amended, are in condition for allowance. More specifically, it is Applicant's position that there is sufficient disclosure within the present application to support the amended claims, that the Horvitz reference does not anticipate claims 1, 2, 4-12 and 14-22, as amended, and that the combination of Horvitz and Zellweger does not render claims 23-25, as amended, unpatentable. Applicant respectfully requests withdrawal of the pending rejections and allowance of the above-mentioned claims. If any issues remain that would prevent issuance of this application, the Examiner is urged to contact the undersigned prior to issuing a subsequent action.

The Commissioner is hereby authorized to charge any additional amount required, or credit any overpayment, to Deposit Account No. 19-2112.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'W. B. Kircher', written over the words 'Respectfully submitted,'.

William B. Kircher
Reg. No. 22,481

SHOOK, HARDY & BACON L.L.P.
One Kansas City Place
1200 Main Street
Kansas City, Missouri 64105-2118
816/474-6550